

2020

ANNUAL STEWARDSHIP REPORT

PREPARED BY



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STEWARDSHIP IN ACTION

The goal of the Lower Thames Conservation Authority (LTVCA) is to achieve a balanced healthy watershed. Healthy land management practices leads to healthy water which then provides optimum living conditions for the species that call the Lower Thames Valley Watershed home.

Every part of the environment is connected, taking action to implement stewardship projects will improve the health and resiliency of the Lower Thames watershed. Planting trees and restoring marginal land will provide habitat for species at risk, improve water quality, and sequester carbon.

Farmers who are taking action to improve soil health by implementing agricultural BMPs will also improve water quality. These collective actions by regional stakeholders will help address the significant environmental challenges that are present in the Lower Thames watershed

Balance in nature is everything. The following report outlines how the LTVCA is working with watershed stakeholders to improve the environmental health of the Thames River watershed.

LOWER THAMES VALLEY CONSERVATION

LAND STEWARDSHIP

2020 IN REVIEW



LTVCA PLANTINGS
70 793



LANDOWNER PLANTINGS
20 602



LARGE TREES
1 029



TALL GRASS PRAIRIE
PROJECTS
23



WETLAND PROJECTS
25

The Lower Thames Valley Conservation Authority in partnership with our community partners and landowners have planted a total of **90 366** trees.



Seedling Landowner
Contribution
\$21 712



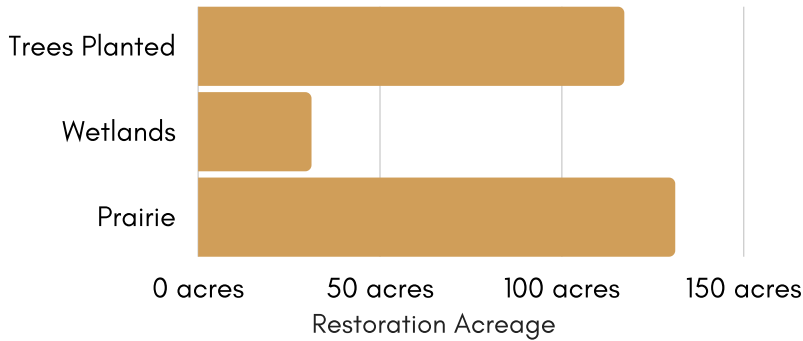
Tree Planting Partner
Contribution
\$111 200



Prairie Partner
Contribution
\$165 030

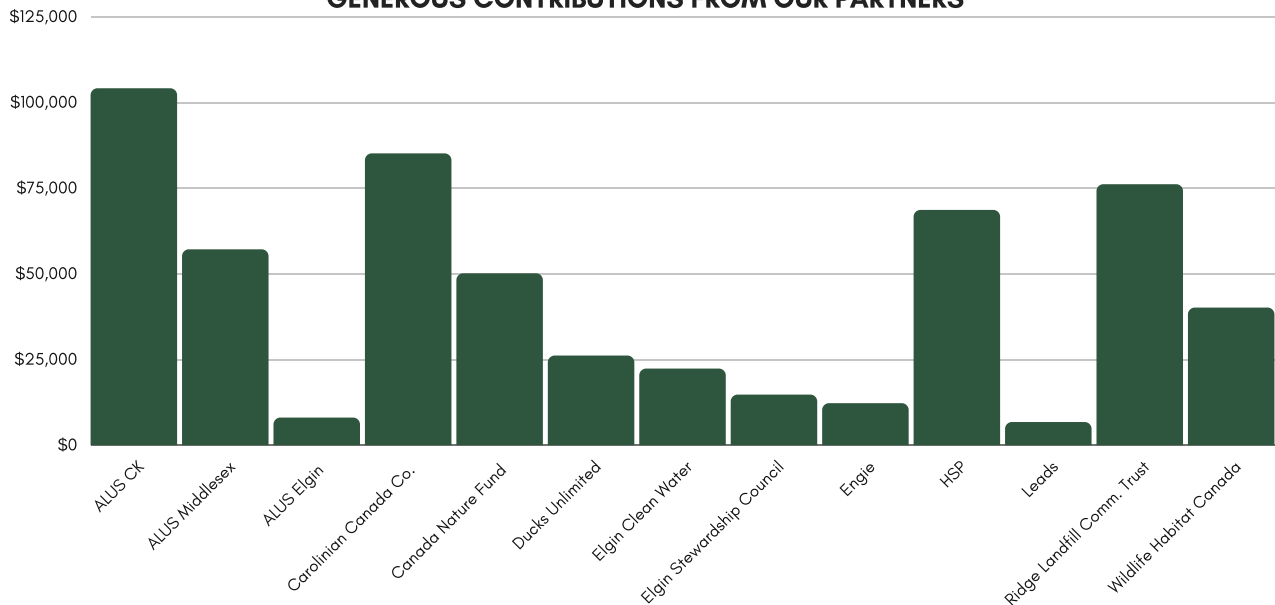



Wetland Partner
Contribution
\$222 065



FULLTIME
SUMMER STUDENTS

GENEROUS CONTRIBUTIONS FROM OUR PARTNERS





STEWARDSHIP IN AGRICULTURE

- The LTVCA is working with agricultural stakeholders to improve regional soil health, nutrient management, and water quality.
- Best Management Practices (BMPs) Implemented by farmers will contribute to the reduction of Phosphorus(P) loads in the Lake Erie Basin.
- The Thames River has been identified as a priority watershed to reduce dissolved and total P loadings by 40%, based on 2008 levels. If achieved, it is anticipated that the severity of harmful algal blooms in the Lake Erie Basin will be reduced.

For more information on historical Phosphorus loadings in the Lake Erie Basin, visit the Erie Stat website: [**https://bit.ly/3fnnWvL**](https://bit.ly/3fnnWvL)

AGRICULTURE IN FOCUS: 2020



40 agricultural producers received grants to implement BMP's in the Sub Watershed of McGregor & Jeanettes Creek.

\$85 172

funded in part by the Environment and Climate Change Canada Great Lakes Protection Initiative.

MCGREGOR JEANETTES CREEK PROGRAM

The MJCRP continues with the main goal to improve soil health and reduce agriculturally sourced Phosphorus(P) loads. Furthermore, the LTVCA will assess the efficacy of implemented BMPs at retaining P on the landscape. The program will continue during 2021.

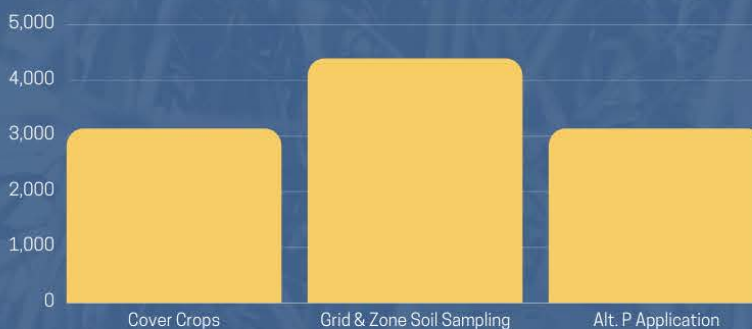



MITIGATING PHOSPHORUS

THROUGH THE USE OF:

- Cover Crops
- 4R Nutrient Management Plans
- Alternative Phosphorus Application
- Erosion Control Structures
- Farmer Innovative Solutions
- Marginal / Sensitive Land Restoration

BMP IMPLEMENTATION ACREAGE





AQUATIC SPECIES AT RISK (SAR)

Work continued on the Lower Thames Valley Conservation Authority Aquatic Species at Risk Threat Assessment. Individual reports detail the biotic and abiotic characteristics of the LTVCA's 55 subwatersheds.

Based on the factors summarized in these reports (SAR present, watershed features, threats to aquatic SAR and impacts to SAR downstream), LTVCA's subwatersheds were assessed and prioritized in terms of their potential to maximize fish and mussel SAR recovery through the completion of habitat restoration and threat mitigation activities.

Habitat Stewardship Program (HSP) and Canada Nature Fund for Aquatic Species At Risk (CNFASAR) funds also contributed to the successful implementation of **18 projects** including **15** rock chutes **9.6 ha** of prairie riparian corridors, **2.66 ha** of treed riparian corridors, and **5.03 ha** of restored wetland habitat.

These projects will reduce the quantity of sediment, nutrients and contaminants reaching watercourses that are home to or upstream of aquatic SAR. Funding also supported Stewardship Information Nights held in Wardsville and Tilbury to increase awareness of aquatic SAR and human threats to them, generate interest in undertaking stewardship projects to reduce threats and highlight available funding.

LTVCA

STEWARDSHIP ANNUAL REPORT

AQUATIC SPECIES AT RISK

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55 SUBWATERSHEDS
11 PRIORITY SUBWATERSHEDS
18 PROJECTS



7 E-DNA SAMPLING SITES
66 SPECIES DETECTED
4 SPECIES AT RISK
17 MUSSEL SPECIES

3 SITES SEINED
340 FISH PROCESSED
22 SPECIES
3 INVASIVE SPECIES



1 "SURPRISE" SPECIES
THE FLATHEAD CATFISH

Resulting in important reductions in watercourses



Sediment



Nutrients



Contaminants



THANK YOU:

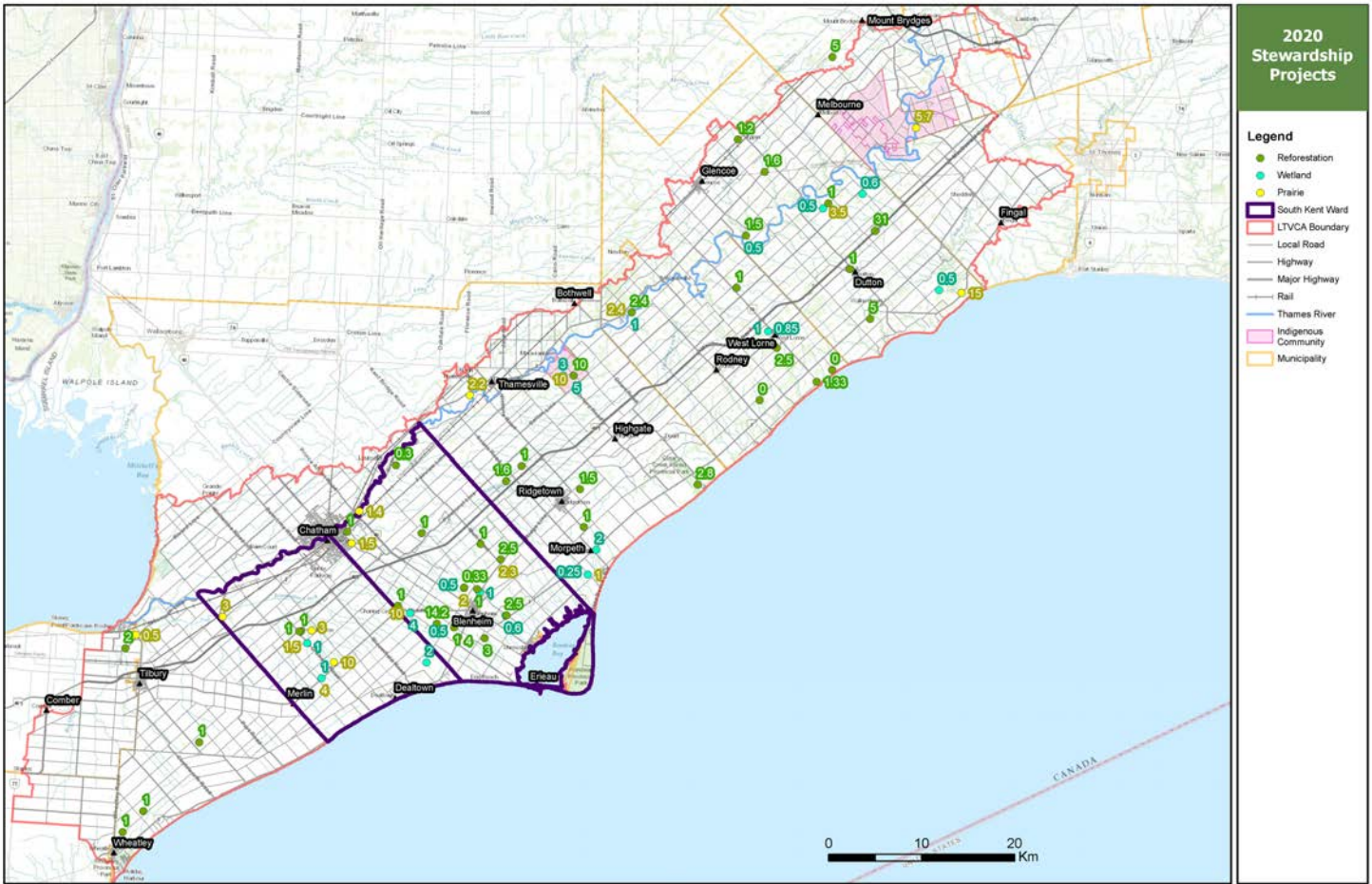
ALUS CK
ALUS MIDDLESEX
ALUS ELGIN
CAROLINIAN CANADA COALITION
CANADA NATURE FUND
CANADA SUMMER JOBS
DUCKS UNLIMITED CANADA
ECO CANADA
ELGIN CLEAN WATER
ELGIN STEWARDSHIP COUNCIL
ENGIE
HABITAT STEWARDSHIP PROGRAM
LEADS
TREE CANADA PROJECT LEARNING
RIDGE LANDFILL COMMUNITY TRUST
RIDGE LANDFILL MITIGATION
WILDLIFE HABITAT CANADA

ENVIRONMENT & CLIMATE CHANGE CANADA
ONTARIO MINISTRY OF AGRICULTURE, FOOD
& RURAL AFFAIRS
CANADA WOODCRAFT
RE LEAF CHATHAM KENT

Projects of Note:

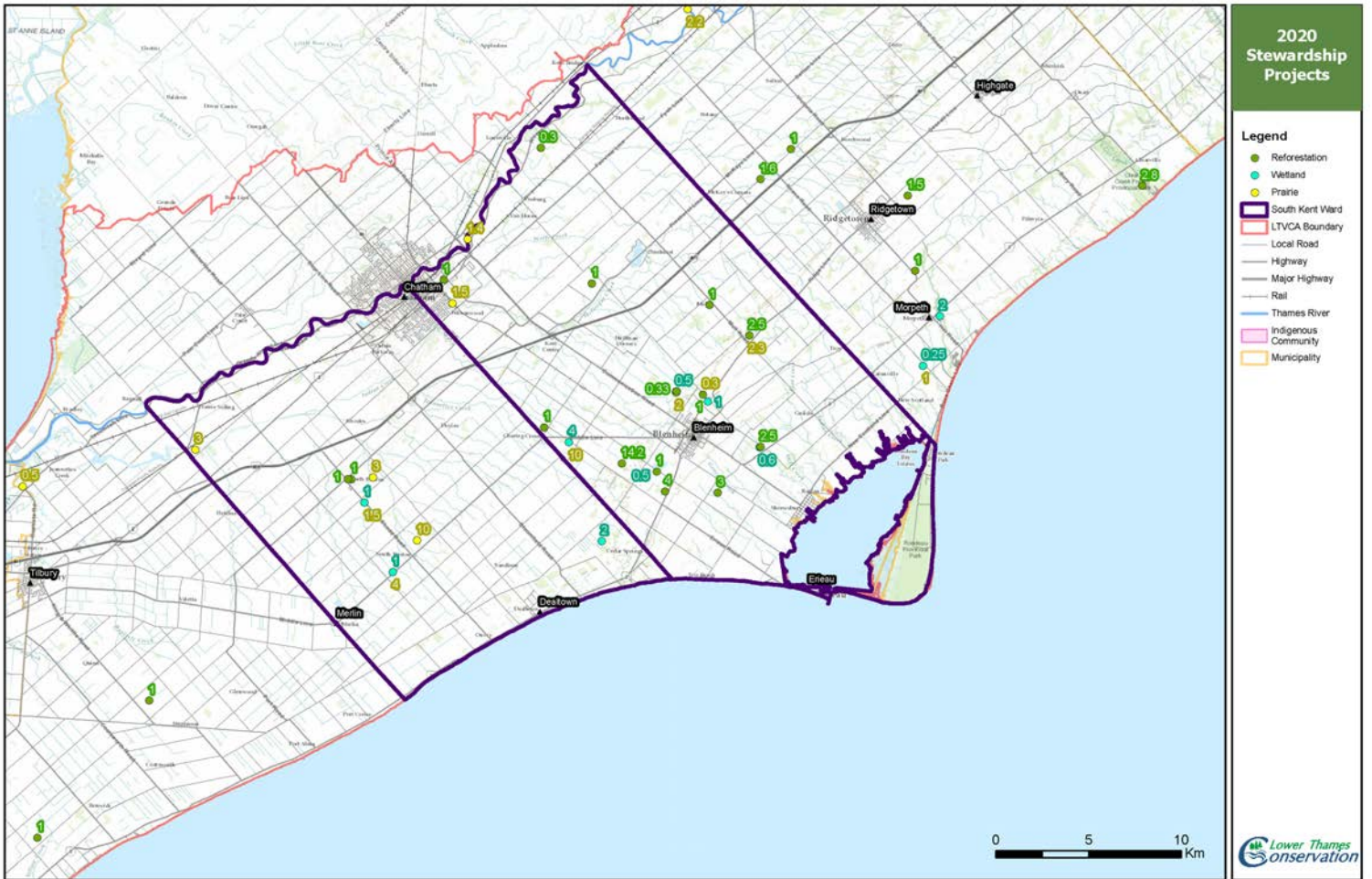
EASTERN MEADOWLARK PROJECT \$88 000
(Ridge Landfill Mitigation)

RIDGE LANDFILL COMMUNITY TRUST
\$1 000 000 (over 10 years)



Watershed Projects

PROJECTS



South Kent Project Focus